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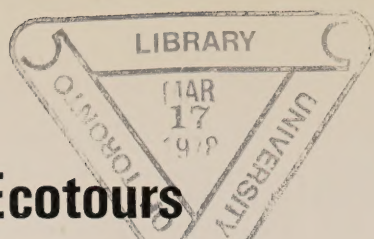
Government
Publications

ECOTOUR

of Superior Country along the Trans-Canada Highway
White River to Sault Ste. Marie

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A word about Ecotours

Ecotours have been designed by the Canadian Forestry Service to help you, the traveller, understand the phenomena that have contributed to the landscape you see—from wind to water, from beavers to birch trees. Both natural and human history are described and interpreted. The route covered by each Ecotour is divided into major landscape types (Ecozones), and a map for each Ecozone shows the location of interesting ecological features, identified by code numbers (e.g., 11.). Most of these ecological features can be seen from your car, but occasional stops are recommended. We suggest that you keep a record of the distance you travel, and read up on each feature before you reach it.

Introduction to Superior Country

The world's largest freshwater lake, the nation's lowest temperatures, the province's highest elevation and deepest offshore trenches—these are just a few of the superlatives to which Superior Country can lay claim. From White River, the heart of a vast hunting and fishing area, to Sault Ste. Marie, the hub of the Great Lakes, our Ecotour takes us through one of Canada's most beautiful wilderness areas. This is the longest unpopulated stretch of the Trans-Canada Highway, and as our route skirts the north shore of Lake Superior for much of the distance, we are afforded a magnificent view of whitecapped waves, windswept beaches and rocky inlets.

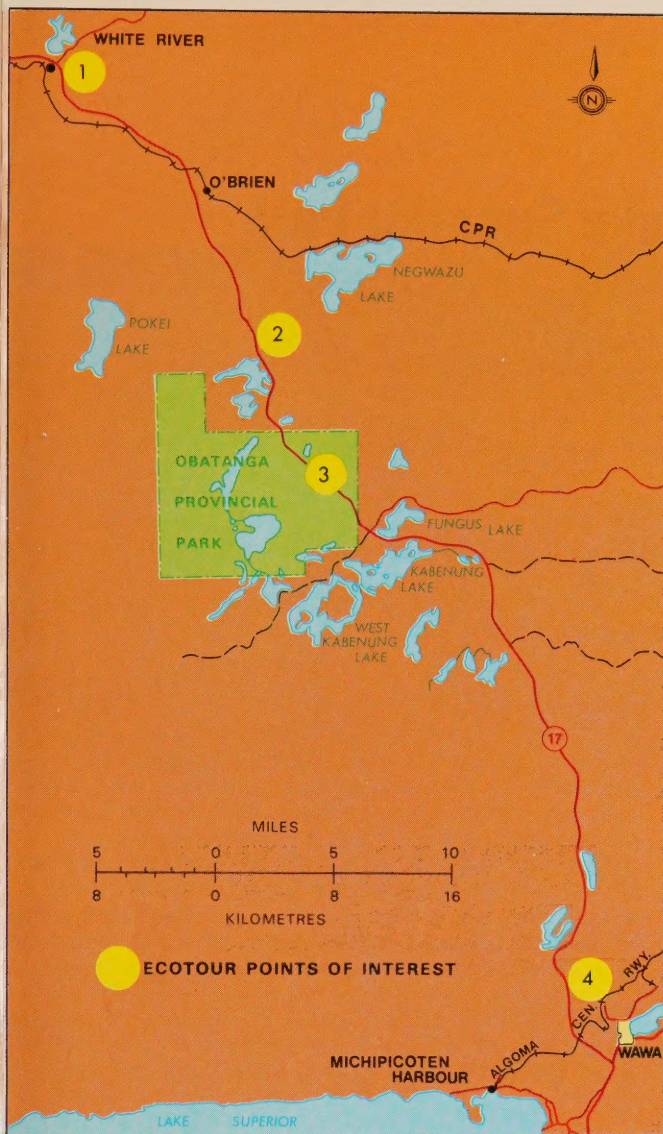
Superior Country lies within the Canadian Shield, that immense land mass carved out of sedimentary, igneous and metamorphic rocks formed during the Precambrian era. The Shield has shaped the landscape and, to a considerable extent, the lives of the people who settled here. Although the communities along this route were originally based on forestry and fur trading activities, mining of copper, gold, iron and uranium provided additional employment around the turn of the present century.

Several times during the past million years huge glaciers up to one mile thick have moved from the northeast, bulldozing rock debris before them. Occasionally they blocked lake outlets, causing lake levels to rise. In the Lake Superior basin at least three of these higher levels are evident from beach deposits above the present water level.

The Shield and glaciers have, in turn, influenced tree cover to a large degree. Some 4000 years ago the climate of Superior Country began to grow colder, and gradually the flora as we know it was established. Our route takes us



through two major forest regions: the conifer-dominated Boreal Forest region, beginning just south of Wawa, and the mixed deciduous-coniferous forest of the Great Lakes-St. Lawrence region, extending north from Sault Ste. Marie. The most economically important tree species of the Great Lakes-St. Lawrence region is yellow birch, which is used principally for veneer, but a large pulping industry based on black spruce and jack pine has grown up in this area as well. The north shore of Lake Superior is the nesting territory for many species of North American songbirds, including warblers, thrushes and sparrows. The rocky terrain, vast stretches of water, and dense conifer forest provide an excellent habitat for many fur-bearing animals as well. Competition was keen among the early fur traders for the beaver, otter, mink, marten, fisher, lynx and fox that flourished in this area. The root of almost all the threats to natural communities is the explosive growth of the human population. Fortunately, the rugged northern climate has militated against the urban sprawl so characteristic of warmer regions to the south. Communities are few and far between; consequently, despite its abundant natural assets, Superior Country is still relatively unspoiled. However, it cannot remain so indefinitely without a conscientious and concerted effort on the part of all citizens—the tourist and industrialist no less than the researcher and forest manager.



White River-Wawa

away from the warming influence of Lake Superior. Since cold air drains to valley floors, White River is much colder than most places in the district. For hunting and fishing, the White River area has few equals elsewhere in Canada.

(0.0 mi, 0.0 km)

2. In the late 1950s this area was devastated by a forest fire. The new growth consists mainly of aspen, white birch, spruce, and the inevitable fireweed. Fireweed grows prolifically in burned over areas and is a wonderful source of nectar. Beekeepers have been known to move to a large stand of fireweed to set up their apiaries. They sell their product as fireweed honey and get premium prices.

(13.9 mi, 22.24 km)

3. Obatanga Provincial Park is a beautiful natural environment park lying 23 miles (36.8 km) southeast of White River and 34 miles (54.4 km) north of Wawa. Campsites are being developed at Burnfield Lake on the north side of the highway, where a large number of shore birds may be seen. South and east of this park, where the highway crosses Desolation Lake, granitic rocks give way to volcanics and sediments, and the highway enters an iron mining region. Two hundred yards (182.8 m) south of the park entrance, on the west side of the highway, is an excellent example of a black spruce bog. The shorter, slow-growth black spruce of the bog are flanked by the taller-growth black spruce of the adjacent swamps, with their understory of speckled alder. Swamps are rich in mineral nutrients, whereas bogs are nutrient poor; hence the difference in growth rate of black spruce in the two areas.

(9.1 mi, 14.56 km)

4. Wawa is the Ojibwa word for wild goose, and the name of a small mining community at the west end of Wawa Lake. Its most interesting geological feature is the flat sand plain on which it is built. The plain is one of a series of terraces formed when, after the retreat of the glaciers, Lake Superior basin waters stood higher. Wawa originated as a gold rush town in 1896 following the chance discovery of a vein of gold by William Teddy, an Indian resident on a Sunday picnic outing. As the gold boom ended, interest became focused on finds of iron ore. This ore is shipped, after initial refining, to the steel plant in the Sault. Most of the shipping is by rail, with lesser quantities still moving via the ore docks at Michipicoten Harbour to lake freighters for transport

Between the Baldhead River and Lake Kabenung we encounter the oldest rocks along our route. These metamorphosed sedimentary and volcanic rocks are bent and tilted, and some exposed surfaces are stained red and orange as a result of contact with iron in solution. We are well into the Boreal Forest now, the largest forest region in Canada. White and black spruce, balsam fir, white birch and aspen are the common cover types. This is a zone of lakes and wetlands, where beaver, moose and waterfowl make their home.

1. White River, which originated as a Canadian Pacific Railway depot, lies in a deeply eroded, hill-flanked bowl



Lake Superior Park

Lake Superior Provincial Park, which covers an area of over 372,000 acres (148,800.0 ha) is a natural wilderness area stretching for 52 miles (83.2 km) along the eastern shore of Lake Superior. There are three fully developed campgrounds within its boundaries. Nature trails and tours have been developed for the traveller with time to stop and explore. This portion of our route winds along former lowland riverbeds. Between rocky knolls, sand and gravel have been deposited where rivers once flowed, and lakes and wetlands are still abundant in depressions. The Great Lakes-St. Lawrence forest region reaches its northern limit just south of Wawa, where it gives way to the Boreal Forest.

6. About 10 miles (16.0 km) north of the southern boundary of Lake Superior Park, a short access road on the west side of the highway takes us to a rugged and picturesque trail leading to Agawa Rock. Agawa Rock rises 100 ft (3,048.0 cm) above Lake Superior. Scattered along its base are 35 Indian rock paintings or pictographs said to illustrate the story of an Indian war party from the south shore of Lake Superior that destroyed an enemy village near here 150 years ago. The first mention of these pictographs in the literature is in a collection of Ojibwa folklore made by Henry Schoolcraft, a United States Indian agent who lived in the early part of the 19th century. Longfellow based his epic poem *Hiawatha* on the tales in Schoolcraft's collection. A vertical gash splits Agawa Rock. Geologists believe that it resulted

to the Sault. Since the completion of the Trans-Canada Highway, Wawa has become an important tourist center. The surrounding forests and lakes abound in wildlife, particularly moose, beaver, bear and waterfowl.

(33.3 mi, 53.28 km)

5. The Michipicoten River once formed an important link in the canoe route from Lake Superior to James Bay. The route was probably explored at an early date by the French fur traders who maintained a post at Michipicoten. However, the first recorded journeys were not made until the 1770s when the Hudson's Bay Company began to establish fur trading posts along this route inland from Moose Fort.

(3.7 mi, 5.92 km)

Indian pictographs, Agawa Rock





Black bear and cub

from the erosion of a narrow joint, but Indian lore ascribes it to the path of descent of Manabozko, the Devil.

(45.8 mi, 73.28 km)

7. This scenic stop provides a panoramic view of Agawa Bay and its islands. Agawa means "making for safety". The islands, the bay and the river mouth must have provided the Indians with welcome sheltered water along this fairly straight shoreline.

(1.8 mi, 2.88 km)

8. The North American beaver contributed more to the early exploration and development of inland Canada than any other natural resource. Competition for trading rights was especially keen between the French and the English. Developing the fur trade became a problem of organizing the transport of furs over long distances; the waterways became the fur traders' highways. Sault Ste. Marie, because of its strategic position on the Great Lakes waterway, was therefore the funnel for furs going both east and west. By 1821, however, the local fur resource had been depleted by decades of exploitation. As early as 1888 fish and wildlife regulations were passed by the Ontario Legislature, and in 1930 the Goulais River-Ranger Lake Crown Game Preserve was established to assist in the rehabilitation of fur-bearing



Canada goose and gosling

animals in this area. With the increase in the population of fur-bearing animals and the establishment of Lake Superior Park this preserve was no longer necessary, and was abolished in 1959.

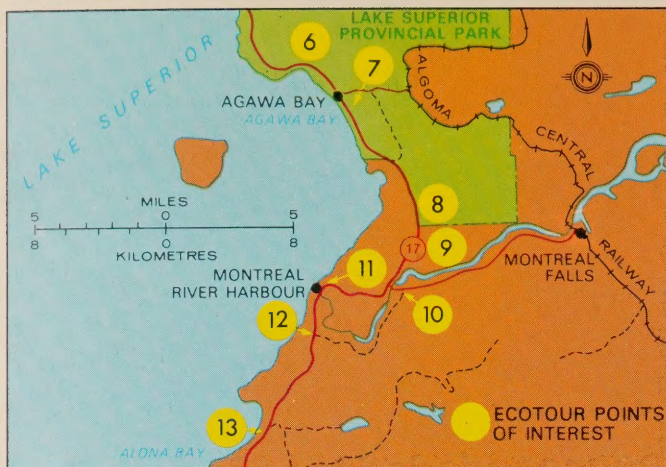
(8.0 mi, 12.80 km)

9. About 11,000 years ago the latest retreat of the glaciers began. Within a thousand years the first ice-free land appeared to the east of Sault Ste. Marie along the north shore of Lake Huron. Among the many Arctic species which must have colonized the shores of this strip of bare soil and rock were some which have left behind small populations in scattered habitats along the cold shores of Lake Superior. As we drive through Lake Superior Park, particularly where the highway skirts the lakeshore, we may observe clumps of mountain club moss, woodsia, alpine bistort, butterwort and crow-berry clinging to the rocks.

(0.8 mi, 1.28 km)

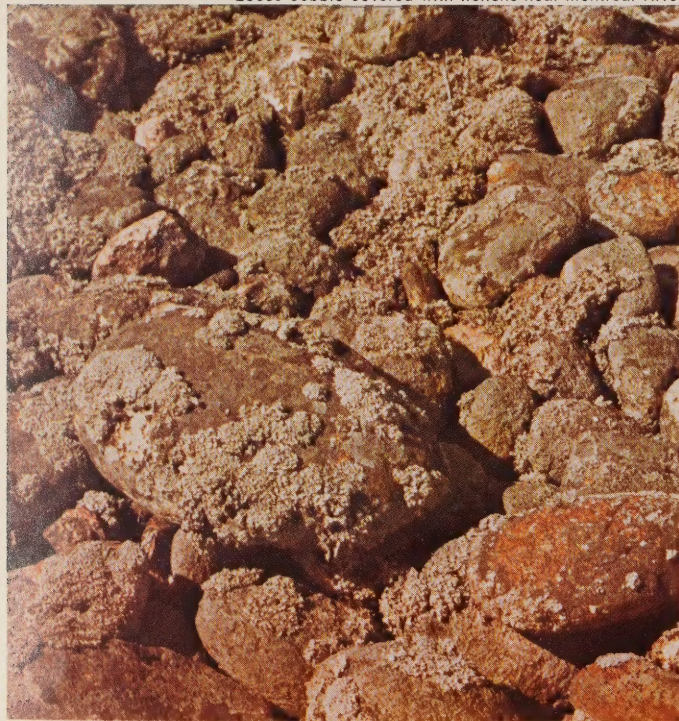
Beaver





Once again we catch sight of the granite Shield, which extends to the lakeshore. Our route threads across rugged upland, affording panoramic views of the deeply indented coastline and rugged hills. Hardwoods predominate in this zone, but here and there along the cliffs pines poke out from narrow crevices, their trunks gnarled and dwarfed by strong winds blowing off the lake. We are reminded that Superior Country formed the backdrop for many of the rugged landscapes painted by Canada's famous Group of Seven artists.

Loose cobble covered with lichens near Montreal River



Agawa Bay-Alona Bay

10. We are now in the heart of "Group of Seven" country. Montreal River and Lake Superior were favorite subjects of Canada's most famous school of artists; in the early 1920s they journeyed up the railroad to paint such pictures as *The Solemn Land* and *Wild River*. For them, the attraction of this area was the richness and clarity of color in the woods.

(2.6 mi, 4.16 km)

11. The 65-mile (104.0-km)-long Montreal River, the longest we cross on our route, empties into Lake Superior at the village of Montreal River through what appears to be a crack in the earth's surface, but is actually an eroded dike. (A dike is a tabular body of igneous rock that has been injected, while molten, into a fissure.) The black rock of the dike is more easily worn away than is the surrounding granite, and the steep-walled canyon through which the river flows resulted from the rapid erosion of the dike by the river. Four hydroelectric generating stations on the river supply power to the Sault Ste. Marie area. Historically this river had one of the few known populations of river-spawning lake trout which lived in Lake Superior. Commercial fishing and the sea lamprey, however, succeeded in reducing the lake trout numbers to insignificance. Some of these stocks, with their unique genetic makeup, have been rescued and are now resident in Mishibishu Lake near White River.

(3.4 mi, 5.44 km)

"Group of Seven" country



12. After the glaciers melted, the Canadian Shield was bare of vegetation. The first plants to colonize the Shield were lichens, those pioneer species that grow where nothing else can. Lichens are mutually benefiting associations of algae and fungi: the fungi alone are capable of fruiting, while the algae carry on photosynthesis, thereby manufacturing food for the lichens. This mutually beneficial relationship is called symbiosis. Near Montreal River there is a field of loose cobble that was once the beach of a glacial lake. It is so porous that rain simply disappears into it, and nothing can grow here—nothing, that is, except lichens. The field is covered with lichen mats, some as much as 1 ft (30.48 cm) thick.

(0.3 mi, 0.48 km)

13. The small island in Alona Bay is Ossifrage, named after the iron ore carrier out of Wawa, which was wrecked here. The point, Theano, is named after another carrier which sank in 1948. A prospector on board the Theano, Robert Campbell, was searching for a vein of pitchblende that had been discovered in 1847 and was subsequently lost. Campbell's rediscovery of the vein sparked a uranium rush in the area. During the 1950s, claims were staked and small mines were opened between Theano Point and Montreal River. Production was shortlived, but the rush of prospectors into the general region led to the discovery, east and north-east of Blind River, of the great Elliot Lake uranium deposits.

(6.0 mi, 9.60 km)

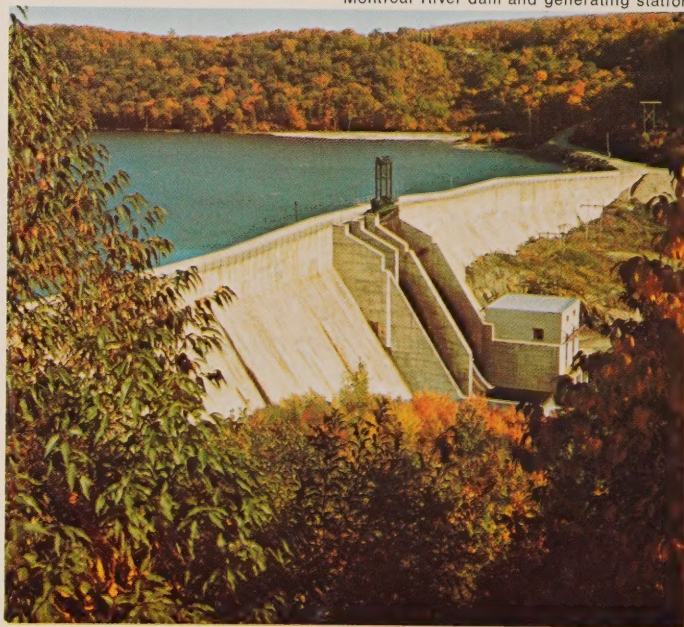


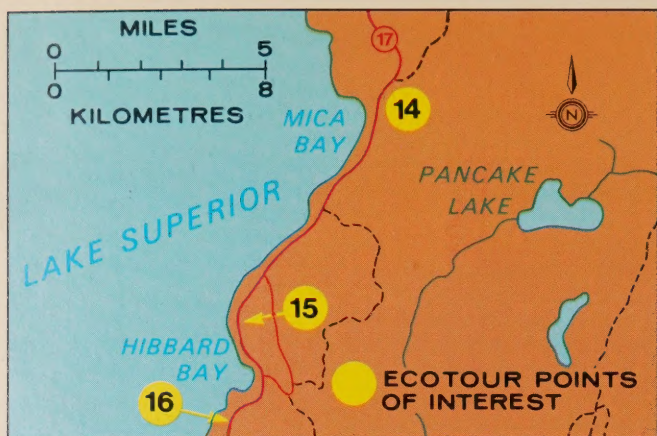
Herring gulls, Theano Point



Moose

Montreal River dam and generating station





A change in geological formation is evident along this segment of shoreline, where volcanic lavas and red sandstone predominate. It is thought that one billion years ago when these lavas flowed to the surface of the earth the adjacent area collapsed into the cavity vacated by the lavas to form the Lake Superior basin. The lavas solidified quickly on the surface, trapping small air bubbles that remain as holes within the rocks. Agates and copper collected in the holes, making this an excellent area for rock collecting.

14. Although their way of life did not lend itself to the establishment of a logging or pulp and paper industry, the Indians who lived along the shores of Lake Superior were familiar with many uses to which the native trees could be put. The superb Algonkian canoe, for example, was made from birch bark sewn together with cord made from the roots of spruce or jack pine. Spruce beer, a wholesome though not especially palatable drink, was popular among the Indians of this area before the white man introduced his noxious firewater. This beer was a valuable source of Vitamin C and mineral nutrients when fresh fruit and vegetables were unavailable during the cold winter months.

(2.0 mi, 3.20 km)

15. Mamainse is the site of ancient Indian copper mines which may have been worked as long ago as 6000 B.C. Copper ornaments from Lake Superior were traded throughout North America before the arrival of the Europeans. Etienne Brulé, the first white man to visit Lake Superior, carried news of the copper back to the King of France in 1623, but mining did not begin until 1772. At Mamainse, a mine was opened in 1889, and for 5 years a bustling community of 400 existed on this site. When the ore ran out the people moved to similarly shortlived communities along the shore.

(6.8 mi, 10.88 km)

Mica Bay-Hibbard Bay

16. Every protected harbor along the route has at one time been home port to a commercial fishing enterprise. Here we find one of the few remaining fleets on Lake Superior. Although the lamprey eel eliminated many fisheries in the 1950s, government programs aimed at controlling this pest and restocking creeks with fish reared in the Sault Ste. Marie hatchery have resulted in increased catches in recent years. Herring, yellow pickerel, whitefish, lake trout and the hybrid splake are shipped from here to large cities as far away as New York.

(2.3 mi, 3.68 km)

Fishing fleet, Mamainse Harbour



Lighthouse, Hibbard Bay



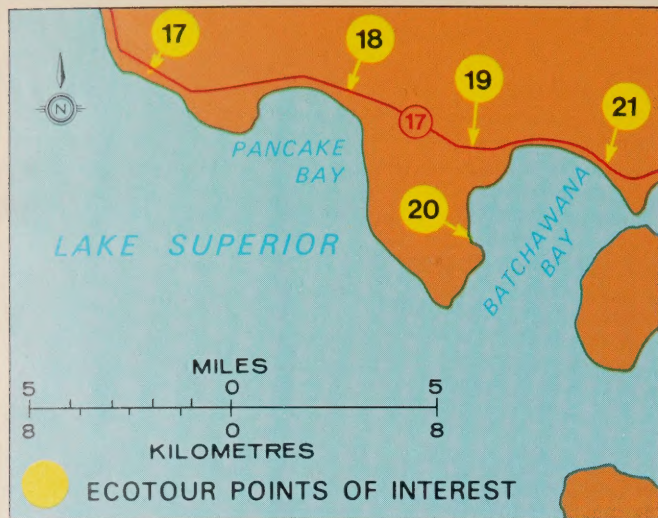


Marsh marigolds
Queen lady's slipper



Bunchberry
Trillium





Pancake Bay-Batchawana Bay

is shallow and protected—the warmest found along our route—and this accounts for the concentrated cottage development on the shore. Beyond the narrow shoreline band of sandstone lowland are the hills of the Shield. Here we find some of the highest elevations in Ontario, with peaks reaching 2200 ft (670.5 m) above sea level.

17. The lighthouse commemorates the Charles Hibbard, a lake freighter which sank off these rocks in 1902. Before roads and railroads were built, miners, loggers and settlers relied on the lake for their link with the south. From December through April, these people were isolated. During the spring and fall, winds sweeping the length and breadth of Lake Superior made travel dangerous. Many boats were swept ashore in storms.

(1.6 mi, 2.56 km)

The early Indian inhabitants of this area found Batchawana Bay ideal for canoeing, and the rivers feeding into the Bay provided avenues inland to their hunting and fishing grounds. The water here

Batchawana Beach



18. Pancake Bay was named by fur traders who camped and had their meal here at the mouth of the Pancake River. The present campground is expanding to meet the demands of the ever-increasing number of campers who visit the area. To extend park use year-round, over 100 miles (160.0 km) of snow machine trails have been developed.

(7.3 mi, 11.68 km)

19. North of the Batchawana village road the flats crossed by the highway are covered mainly with black spruce swamp. Attempts to introduce other species have failed, but black spruce has the advantage of being able to reproduce by "layering" as well as by seed. This means that the lower live branches on becoming covered by mosses or litter develop roots, and the branches eventually become new trees.

(4.1 mi, 6.56 km)

20. The white mission church of Batchawana village on the northern point of Batchawana Bay comes into view as we follow the curving shore of Lake Superior. "Batchawana" comes from the Indian word Obajew-unung meaning "narrows and swift waters there", referring to the swift water which poured through the narrow mouth of the bay when forced east by strong winds from Lake Superior. Although Batchawana was originally an Ojibwa village, its Indian residents are today being outnumbered by non-Indian workers and their families. The latter group have been attracted to the area by copper mines, logging operations and the expanding tourist industry.

(3.2 mi, 5.12 km)

21. A Hudson's Bay Company fur trading post was built here near the mouth of the Batchawana River in 1824 to collect beaver pelts from the Ojibwa. A community of 200 grew up around the post, but famines and a decline in the number of pelts available forced the closing of the post in 1894.

(0.5 mi, 0.80 km)

Mission church at Batchawana Village



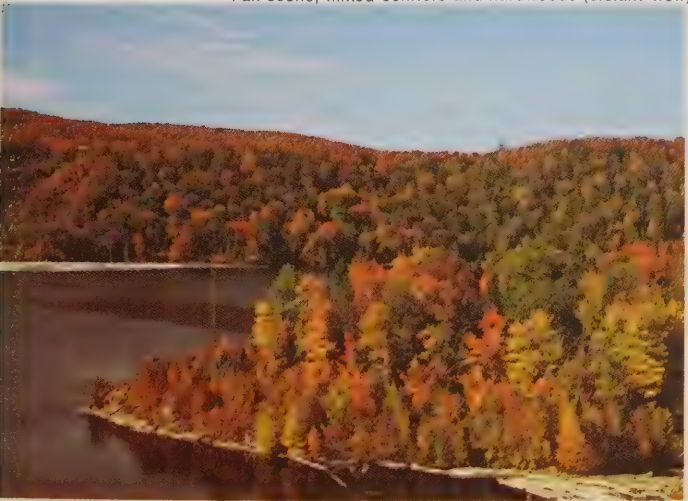
Black spruce swamp flats near Batchawana Village



Fall scene, mixed conifers and hardwoods (closeup)

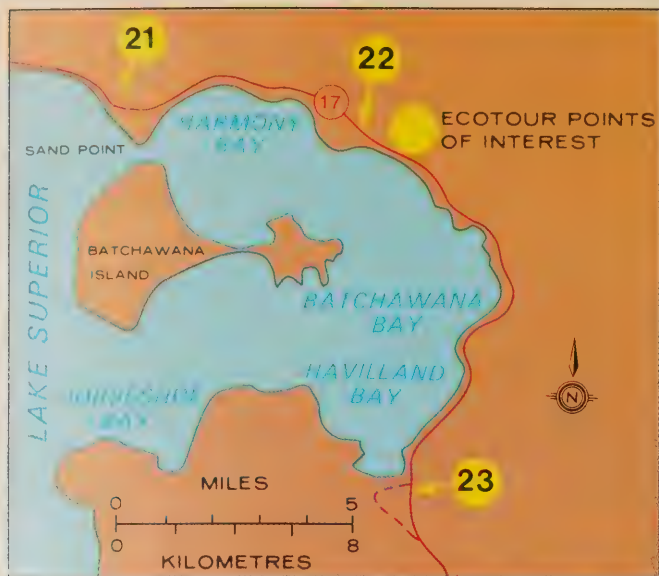


Fall scene, mixed conifers and hardwoods (distant view)



Spruce swamps





Harmony Bay-Havilland Bay

secluded upper falls where a wide black dike intrudes into the pink granite. The falls are at their most spectacular in late spring, swollen with meltwater from winter snow. Rainbow trout and smelt runs make the streams in this area very popular with local fishermen.

(5.0 mi, 8.00 km)

23. At Havilland Bay and in many other locations to the north, the shoreline is utilized for private cottage lots. Planning of recreational and other types of land use has been very haphazard along the north shore because northern Ontario has traditionally been considered a region of unlimited land resources. However, in 1970 the responsibility for planning was given to the Sault Ste. Marie and District Planning Board.

(10.4 mi, 16.64 km)

This zone is underlain by horizontal, easily eroded layers of sandstone similar to those of the St. Mary's River lowland. At one time Lake Superior extended this far inland, and what is now ground level was then the lake bottom. Beach deposits lie on hilltops on both sides of the valley, and sand covers the valley floor. Initial settlement in this valley was agricultural, but today the land is used primarily for residential and recreational purposes.

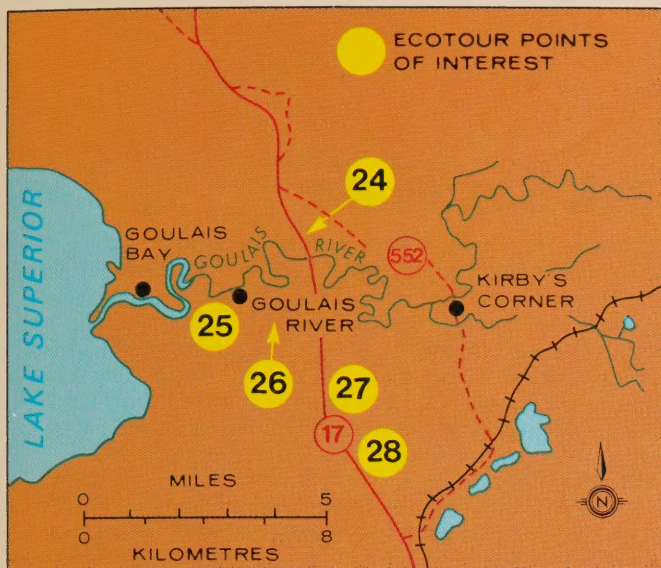
22. The picturesque Chippewa Falls is actually two falls of 20 ft (6.1 m) each. Water tumbles over the remnants of black lava that overlies older pink granite at the lower falls. A brief walk up the path leads to the more

Granite ramparts near Goulais River



Chippewa Falls





Here the rounded granite hills of the Canadian Shield rise suddenly from the surrounding lowland. This is a zone of lakes, waterfalls and streams, many of which have been stocked with trout to supplement declining fish populations. In low-lying areas, swamps, marshes, fens and bogs provide a wide variety of habitats for waterfowl, shore birds, moose and beaver. Maple forest dominates the higher ground, while white birch is common on the poorer sites and pine on exposed ridges. Timber stands in this area were first logged over a century ago, and the wood was brought to Sault Ste. Marie for processing.

24. About 18 miles (28.8 km) from Sault Ste. Marie, just north of the Goulais River turnoff, a short side road to the east leads to a hillside popular with local bird watchers. The granite ramparts provide ideal nesting places for common ravens while tree dwellers such as warblers, scarlet tanagers and indigo buntings inhabit the surrounding hardwood forests.

(3.9 mi, 6.24 km)

25. About 15 miles (24.0 km) north of Sault Ste. Marie along the turnoff to Goulais River is a large swamp which is the home of moose, waterfowl and swamp orchids. The Queen lady's slipper has the largest blossom of all the orchids in the district, close to 3 inches (7.62 cm) across. The spotted coral root, which is about 12-16 inches (30.48-40.64 cm) tall, grows only in the Lake Superior region. To obtain nutrients, the orchids team up with nitrogen-fixing fungi, whose threads entwine their roots.

(2.6 mi, 4.16 km)

26. The road to Goulais Mission leads through a once

Goulais River Valley

thriving agricultural area, now reverting to its natural state, to an Indian reserve. At one time the Ojibwa nation made its base along the shores of Lake Superior, but now the largest Ojibwa population is concentrated on the eastern limits of Sault Ste. Marie, and very few Indians remain at Goulais.

(0.8 mi, 1.28 km)

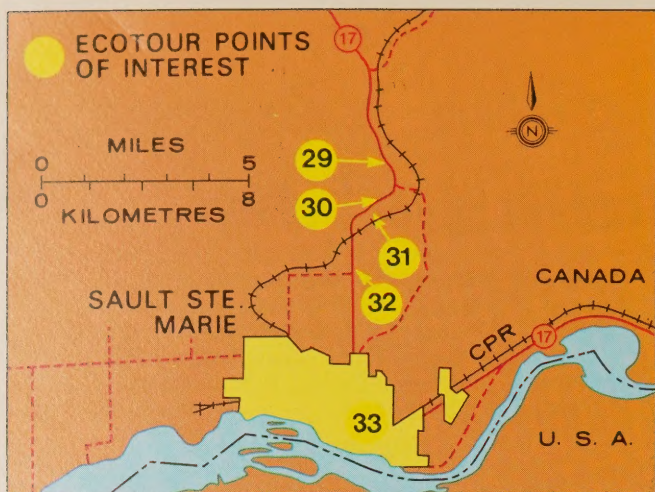
27. Two insectivorous plants inhabit the swamps and bogs along our route. The pitcher plant supplements its nutrient intake with insects that fall into and drown in the water contained in its cup-forming leaves. The sundew attracts insects to the bright red hairs on its leaves: a sticky secretion on the hairs then traps the insects. Both plants secrete enzymes that digest the bodies of their prey.

(3.7 mi, 5.92 km)

28. Mile Hill affords an excellent view across the lowlands that were once inundated by Lake Superior. The cool, moist microclimate of the valley floor provides suitable habitat for conifers such as black spruce, jack pine and white pine. Hardwood forests flourish on the surrounding hills. Through this valley meanders the Goulais River, with little elevation to give it a more direct course. On a crisp, clear winter night, as you climb Mile Hill, if you listen carefully you may hear the mournful howl of the brush wolf in the distance.

(1.9 mi, 3.04 km)





29. White-tailed deer, familiar to the present-day big game hunters in the Sault Ste. Marie area, were unknown to residents a century ago. Changes in habitat produced by the activities of man, however, cleared the way for the coming of deer, and have continued to influence deer populations throughout their history in this area. Logging, which was of an intensive nature in the early 1900s, left in its wake a vast cut-over area on which new growth suitable for deer browsing flourished. The deer feed on the tender shoots of a variety of plants, including the leaves and tips of shrubs and trees, and grasses and sedges in the marsh areas.

(1.3 mi, 2.08 km)

Aerial view of Sault Ste. Marie



Sault Ste. Marie

Hidden beneath sand and gravel deposited by glacial rivers are horizontal layers of sandstone, the rock formation responsible for the St. Mary's River lowland and rapids. Before the white man came, this was an Ojibwa hunting and fishing ground. Following the English conquest of Canada, Sault Ste. Marie became a gathering place for fur traders, and both the Northwest Company and the Hudson's Bay Company had posts here. As North American industry developed, freighters needed easy passage through the rapids; five locks were therefore built at the turn of the 20th century. Much of this zone was cleared for agriculture in the 1880s, but as farming is abandoned, fields return to forest cover.

30. Numerous wild flowers are found in the Sault Ste. Marie area. Because this is a transition zone between the southern hardwood forest and the northern coniferous forest, wild flowers common to both the southern and northern parts of Canada flourish here. The first to appear in spring are the dogtooth violets or adder tongues. These are followed by white, yellow and blue violets, and Ontario's provincial flower, the trillium. In summer we find milkweed, the chief source of food for larvae of the migrating Monarch butterflies. Trailing arbutus is abundant here in the sparsely populated areas. Originally it flourished in eastern Canada, but it is one of the first wild flowers to disappear when man invades its territory. When you pick an arbutus you may pull up one of the runners, which could be 100 years old. Only more care in picking this delicate flower will preserve it, for its roots are slow to grow anew.

(3.4 mi, 5.44 km)

31. The Algoma Central Railway passes over the Trans-Canada Highway as it winds 236 miles (377.6 km) northward to Hearst to join the Canadian National Railway. The ACR formed the link between Sault Ste. Marie and its inland resource base, and made it an industrial town at the turn of the century. Its main purpose was to serve the power company, pulp and paper company and steel plant in Sault Ste. Marie by making the northern timber sources accessible, hauling pulpwood, pine logs and iron ore, and encouraging prospecting. Dense forests, rocky hills, rivers and deep ravines such as the Agawa Canyon had to be conquered before it came into being.

(2.5 mi, 4.00 km)

32. Wishart Park is the site of one of Ontario's newest botanical gardens. A variety of species are represented,

including the southern sun-loving tulip tree, but members of the local Botanical Society who have been largely responsible for the Park's development plan to concentrate on arctic species. Wishart Park is located about one mile (1.6 km) east of our route on the Fourth Line but a visit there is well worth the slight detour. A trail begins north of the parking area and ascends the hill by a series of steps. Winding across the hilltop it eventually branches, with one arm descending to the fern-filled valley to the north and the other continuing along the hill crest. A fine lookout across the bottom-land and Root River to the south shore is afforded from this latter trail.

(1.8 mi, 2.88 km)

33. Sault Ste. Marie, on the north shore of St. Mary's River between Lake Superior and Lake Huron, is built on clay, sand and gravel deposits. These deposits form flat or gently sloping terraces that were built up when the lake waters, after the retreat of the Pleistocene glaciers, stood much higher than they do today. The economy of Sault Ste. Marie is based on the resources of the area north to Wawa, and on its location at the hub of the Great Lakes. The area to the north supplies timber for pulp and paper and veneer mills, iron ore for the steel plant, a research base for government forest laboratories, and a recreational outlet for the city's 80,000 inhabitants. Sault Ste. Marie was the ancient home of the Ojibwa Indians before the white man came. The Indians named the place Bawating in reference to the swift water over the river rapids. In 1668 Jesuit priests established a mission here and called it Sault de Ste. Marie, or St. Mary's Rapids.

(5.6 mi, 8.96 km)

Rock cut along Lake Superior route



Guide to the Geology of the White River-Sault Ste. Marie Route

Age of Major Rock Formations

2.7
billion
years

ancient meta-volcanic and sedimentary rocks, once horizontal layers, now twisted and tilted. These contain minerals such as iron and gold, and may be seen in the vicinity of Wawa.

2.5
billion
years

Algoman granites. These are the most common exposed rock formations of the area along our route. They are the core of an ancient mountain zone.

1.1
billion
years

Keweenaw volcanic rocks, found in the Mamainse area, and dikes of black diabase or large-grained granites intruded into older rocks.

600-500
million
years

Cambrian: Lake Superior sandstone, a water-laid rock formation, still in near-horizontal layers and underlying the major valleys from Sault Ste. Marie north to Mica Bay.

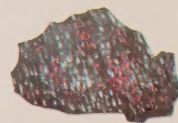
1 million
to 10
thousand
years

the Pleistocene era with four major glacial advances leaving debris over the land.

Some Rock Types Common to the Lake Superior Route

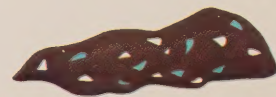
Granite

white . . . quartz
pink or red . . . feldspar
black . . . biotite or hornblende



Lava

dark red or grey
cavities filled with
white (quartzite) blue (copper)



Meta-sedimentary Rocks





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Contribution to the
Man and the Biosphere
Program/Canada

Contribution au
Programme l'homme
et la biosphère/Canada

Suggested Reading :

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Sault Ste. Marie, Ontario
- Cartography, Art Work and Production: Graphics Unit, Information
Services Division, Ottawa, Ontario
- Printing: Richelieu Graphics Ltd., Hull, Quebec

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Our forest environment and the Canadian Forestry Service

The volume and multiplicity of forest products has earned Canada a place of prominence among the forest nations of the world. But now, with a dawning comprehension of its role in the great ecological complex, Canadians begin to perceive the forest's broader value as a stabilizer of desired natural patterns and as a retreat for the relaxation and well-being of a people living in crowded cities.

The Canadian Forestry Service of the Department of the Environment is intimately concerned with the forest environment and the forest industries. Its objective is to promote the most efficient management and use of Canada's forest resources compatible with environmental concerns by:

- conducting research and development in the forest management and forest products fields;
- disseminating information and providing technical services to provincial governments, forest industries, and other agencies;
- preparing and distributing information to the general public;
- providing grants to universities to encourage research in forestry.



Cat. No: F025/1976

Montreal River